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| APPLICATION NO. | 94/27/2001 | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|------------|------------|----------------------|---------------------|------------------|--|
| 09/844,879 | | | Mika Forssell | 975.336USW1 | | |
| 32294 | 7590 | 11/17/2004 | | EXAMINER | | |
| SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR | | | | IQBAL, KHAWAR | | |
| 8000 TOWERS CRESCENT | | | ART UNIT | PAPER NUMBER | | |
| TYSONS CORNER, VA 22182 | | | | 2686 | | |

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | | | |
|--|---|------------------------------------|-------------------------------|--|--|--|--|--|
| | | 09/844,879 | FORSSELL, MIKA | | | | | |
| Office | Action Summary | Examiner | Art Unit | | | | | |
| ` | | Khawar Iqbal | 2686 | | | | | |
| The MAIL Period for Reply | ING DATE of this communication app | ears on the cover sheet with the c | correspondence address | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | | | |
| Status | | | | | | | | |
| 1)⊠ Responsiv | ve to communication(s) filed on <u>27 Au</u> | gust 2004. | | | | | | |
| | | | | | | | | |
| 3) Since this | | | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| Disposition of Clair | ms | | | | | | | |
| 4)⊠ Claim(s) <u>1</u> | 4)⊠ Claim(s) <u>17-36</u> is/are pending in the application. | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | | |
| 6)⊠ Claim(s) <u>1</u> | 6)⊠ Claim(s) <u>17-36</u> is/are rejected. | | | | | | | |
| | 7) Claim(s) is/are objected to. | | | | | | | |
| 8) Claim(s) | 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | | |
| Application Papers | | | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority under 35 U. | S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the particled coning and the second s | | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| | | | | | | | | |
| Attachment(s) | | | | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) Paper No(s)/Mail Date | | | | | | | | |
| U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) | Office Actio | on Summary | Part of Paper No./Mail Date 9 | | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 17-21,24-29,31-35 are rejected under 35 U.S.C. 102(b) as being unpatentable by Koivunen (5479481).
- 3. Regarding claim 17 Koivunen teaches a method for restoring a subscriber context in a network element of a mobile communication network which comprises at least a first and a second network element, the second element storing a plurality of subscribers contexts related to the first network element, comprising the steps of (figs. 2-3):

transmitting a restart information from first to second network element, the restart information indicating whether the first network element has been restarted and whether a subscriber context has been updated in the first network element after the latest restart (col.2, lines 52-67);

continuing the use of a subscriber context updated after said latest restart (col.2, lines 52-67); and

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inactivating the plurality of subscriber contexts which are related to the first network element and have been updated before the latest restart of the first network (col. 2, lines 5-25, col.2, line 52-col. 3, line 15, col. 5, lines 45-65).

Regarding claim 26 Koivunen teaches a system for restoring a subscriber context in a network element of a mobile communication network which comprises at least a first and a second network element, the second element storing a plurality of subscribers contexts related to the first network element, comprising (figs. 2-3):

transmitting means for transmitting restart information from the first to the second network element, the restart information a indicating whether the first network element has been restarted and whether a subscriber context has been updated in the first network element after the latest restart (col.2, lines 52-67);

wherein said second network element comprises receiving means for receiving said restart information, and control means for continuing the use of a subscriber context updated after said latest restart (col.2, lines 52-67) and for inactivation of the plurality of subscriber contexts which are stored in the second net work element related to the first network element and have been updated before said latest restart, in response to said restart information (col. 2, lines 5-25, col.2, line 52-col. 3, line 15, col. 5, lines 45-65).

Regarding claim 31 Koivunen teaches a network element for a mobile communication network, comprising, (figs. 2-3):

transmitting means for transmitting a restart information from the network element, the restart information indicating whether the network element has been

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restarted and whether a subscriber context has been updated in the net work element after the latest restart (col.2, line 52-col. 3, line 15).

Regarding claims 18,21,28,29,32 Koivunen teaches wherein said restart information is a restart counter value and is transmitted together with a context signaling message (col.2, line 52-col. 3, line 15).

Regarding claims 19,20,27,35 Koivunen teaches wherein said restart counter value is compared with a stored restored counter value (number) so as to determine said subscriber context updated before the latest restart (col.2, line 52-col. 3, line 15).

Regarding claim 21 Koivunen teaches wherein said restart information transmitted only one time after said latest restart (col.2, line 52-col. 3, line 15).

Regarding claims 24,33 Koivunen teaches wherein said restart information is transmitted separately or in a separate message (col.2, line 52-col. 3, line 15).

Regarding claims 25 Koivunen teaches wherein said restart information is a restart counter value (col.2, line 52-col. 3, line 15).

Regarding claim 34 Koivunen teaches receiving means for receiving a restart information from anther network element, the restart information indicating whether the anther network element has been restarted and whether a subscriber context has been updated in the anther network element after the latest restart (col.2, line 52-col. 3, line 15), and control means for continuing the use of plurality subscriber contexts related to anther network element and having been updated after said latest restart and for inactivating a subscriber context updated before said latest restart in response to said restart information (col. 2, lines 5-25, col.2, line 52-col. 3, line 15, col. 5, lines 45-65).

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 22,23,30,36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koivunen (5479481) and further in view of Josse et al (6104929).

Regarding claims 22, 23,30,36 Koivunen does not specifically teach wherein said network element is GPRS support node, and wherein said restart information is transmitted together with a tunnel management signaling message and subscriber context is a PDP context.

Koivunen teaches the method uses a visitor location register (VLR), which receives from the home location register (HLR) of the cellular radio system a restart indication. It changes the restart number of the HLR, which sent the restart indication in the HLR list of the VLR. When the VLR receives from a mobile exchange an indication of the establishment of a radio connection with a subscriber, the VLR compares the subscriber-specific restart number of the subscriber with the HLR restart number of the subscriber (col.2, line 52-col. 3, line 15).

Koivunen also teaches the method according to the invention may also be applied in other similar radio systems or in the modifications of the GSM system (col. 3, lines 38-40).

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In an analogous art, Josse et al teaches wherein said network element is GPRS support node, and wherein said restart information is transmitted together with a tunnel management signaling message (col. 21, lines 33-53) and subscriber context is a PDP context (col. 21, lines 33-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Koivunen et al by specifically modifications of the GSM system to GPRS system in order to enhance system performance and increasing the efficiency of system as taught by Josse et al.

Response to Arguments

3. Applicant's arguments filed 8-27-04 have been fully considered but they are not persuasive. Examiner has thoroughly reviewed applicant's arguments but firmly believes the cited reference to reasonably and properly meets the claimed limitations. Applicant's argument was that (claims 17 and 26, but claim 31 does not recite similar features) "Koivunen, however, does not disclose or suggest inactivating a plurality of subscriber contexts using a restarted nod". In response, examiner would like to point out that Koivunen teaches the method uses a visitor location register (VLR), which receives from the home location register (HLR) of the cellular radio system a restart indication. It changes the restart number of the HLR, which sent the restart indication in the HLR list of the VLR. When the VLR receives from a mobile exchange an indication of the establishment of a radio connection with a subscriber, the VLR compares the subscriber-specific restart number of the subscriber with the HLR restart number of the subscriber. It updates the location data of the subscriber on the basis of the

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comparison. " the HLR has sent the restart indication to the VLRs of the cellular radio system, all VLRs that have received the indication have to check all of the subscriber data stored in them and compare their HLR address with the address of the HLR which sent the restart indication. If the addresses are identical, the VLRs further have to set the Radio Confirmation Indicator and HLR Confirmation Indicator of the subscribers of the concerned HLR to the not confirmed state, and perform location updating for these subscribers. This process loads the VLR heavily as the checking of the subscriber data and possible location updating of one subscriber may take even one second. Accordingly, if there are e.g. 10,000 subscribers residing in the service area of the VLR, the checking of all subscriber data and possible location updatings takes 10,000 seconds for the VLR. Moreover, it is possible that HLR subscriber data, which had not yet been stored in the hard disk or in another nonvolatile memory before the restart of the HLR, are false. In such a case, the HLR will provide the mobile exchange calling this subscriber with false subscriber location data, as a result of which the call to the subscriber will be forwarded to a wrong mobile exchange, and the subscriber will not be reached" (col. 2, lines 5-26). Additionally, the examiner has given the claim language its broadest reasonable interpretation. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Anticipatory reference need not duplicate, word for word, what is in claims; anticipation can occur when claimed limitation is "inherent" or otherwise implicit in relevant reference (Standard Havens products Incorporated v. Gencor Industries Incorporated, 21 USPQ2d 1321).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAWAR IQBAL whose telephone number is 703-306-3015.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **BANKS-HAROLD**, **MARSHA**, can be reached at 703-305-4379.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2684 only)

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Khawar Iqbal

RAPAEL PEREZ-GUTIERRE PATENT EXAMINER

19/11/19